

Lights!Camera!Action - Tammi Evanow

Narrative description of how I use technology in the classroom in innovative ways.

As you walk into my 5th grade classroom, you will see 15 student computers, a SmartBoard that replaces the student whiteboard, and a projector that projects the computer image to the large 48"X 62" SmartBoard screen. At all of these real-world tools, you will see students working on various projects from writing reports, presenting PowerPoint projects, and researching the most current information on World Wide Web.

In my classroom, my students are taught two different operating systems, Microsoft XP and Linux. Students alternate between Linux and Microsoft to be able to become familiar with both systems. After learning both, students create a Venn diagram to compare similarities and differences between the two.

My students also learn how to use Microsoft Word as a word processor, write student reports, create classroom newsletters, and create other documents. For example, I assign my students to bring in their favorite family recipe, type it into a Word document, and print it to make a class recipe book. In the process, students are taught how to set margins, change font size, copy and paste pictures, use spell check, the thesaurus, print features, and how to save their work to a folder, the server, or a disk.

In addition to learning the word processor, students are taught how to use Excel to analyze number data. For example, in one lesson, students input measurements of various objects into a spreadsheet to construct the meaning of pi. Formulas do the calculations for the students as they discover that the formula $C/2R$, will equal 3.14 in every case. I feel students remember how and why it works better than just reading about it in our math text book.

Throughout the year, students in my class are taught how to use and present information using PowerPoint Presentation software. An example of one of their multi-media assignments is when students research and create a presentation on an early explorer. Students are required to use at least three different resources, one being the Internet to find their information. Students present their research via PowerPoint using the SMARTBoard, in front of class. They are taught how to input slides, create custom slide shows, and the importance of visual literacy. Students are graded on their use of the tools in PowerPoint, their content, and how well they present their information to the rest of the class. They are so proud to present this information on the large, touch sensitive, computer screen, where each student in the class can see it at once.

Students are also taught how to use the digital camera to put together their very own 5th grade digital scrapbook. Throughout the year, students take digital photos to document their school year. We print these pictures and together create individual scrapbooks for the students to take home at the end of the year.

Having access to tools the world of business uses gives my students an academic edge. By the end of the year, my students are very comfortable using a variety of technology devices as learning and communication tools.

Narrative description of how my use of technology in the classroom has impacted student performance.

Before I was able to obtain/purchase technology for my classroom, I used the traditional text book for my students to read all information, the whiteboard with dry erase markers to write information for students, and encyclopedias to perform research. While these tools are very important in teaching and learning, my students were not as engaged in their learning nor did they seem as excited about their subject area as they are now using a variety of technology tools to learn and present their knowledge.

The integration of technology in the classroom has helped my students meet content standards for my district and state as well as state and national technology standards. When some form of technology has been integrated into a lesson I have taught, students' test scores are higher, especially when compared to a unit with no technology integration.

For example, the Internet has the most current, up-to-date information of all resources for students to gain access to. While teaching a unit on climate, I was able to provide students with live pictures of a hurricane that I displayed on the SMARTBoard for students to view. We tracked the hurricane each day until it reached the shore of the Florida coast. A student in my class was from this Florida coastline and was friends with people from that area. He was genuinely worried. I was able to make contact with his former school administrator who was actually evacuated from the area of impact. The administrator e-mailed my class digital photos of the damage the hurricane caused, and my students were amazed that they were getting minute by minute pictures and the most current information. Having access to immediate information empowered my students with knowledge that increased their understanding about hurricanes and weather patterns; but more importantly, they were able to see the human side of data that my text book could not provide. Empowered with the most current information, students made connections. Connections cause learning.

When my current students were assessed on the unit this year, they performed considerably better on the test when compared to students from the previous year that did not have access to all the technology and the connections the technology provided. In addition to increased performance on tests, students were able to verbally explain the definition of a hurricane, the weather pattern that surround and follow a hurricane, and the damages they can cause.

Overall, technology gives my students tools which make knowledge acquisition more engaging and meaningful to them. They take ownership of their learning experience which is one of the building blocks to life-long learning.

Budget narrative of what I am proposing to purchase for use in the classroom.

In my request, I plan on purchasing video presentation hardware and software to enhance my teaching and to provide my students with real-world learning experiences.

Hardware:

I will be purchasing a desktop computer with video & graphic capabilities. It will be a CLIENTPRO 365 E desktop with 1 gig RAM, 200MB internal hard drive, 256MB express graphics card, and a DVD-R-RW CD Rom Drive. I will also be purchasing a laptop for mobility purposes to enable students to move freely within and outside the classroom. The laptop will be a TRANSPORT X3000 with an Intel Pentium M processor. It will have 1024MB of memory, a 333MHz DDR, an ATI Mobility Radeon 9700 128MB Video Graphics card. In addition to the desktop and laptop, we will be purchasing an external hard drive to download the video for storing video during the editing process. The computers I currently have in my classroom will not handle the graphic and memory requirements for video production.

Software

The software we will be purchasing to capture the video is Visual Communicator. Visual Communicator has the ability to superimpose any background the student chooses. This has the capability to be useful in all content areas. The students will be editing their video using Adobe Premier Elements. This program enables students to add effects and transitions, burn DVDs or CDs and customize their workspace.

Equipment

A Canon ZR400 video camera with carrying case was chosen for its delivery of high quality video and still photos. It has a 14x Optical Zoom Lens and image stabilization which are user friendly to students. We will need a firewire cable to transfer video from the camera to the computers, a battery charger, extra battery and battery pack to be able to shoot video inside and outside the classroom. A tripod is also necessary for handsfree operation of the video camera. Also, a Sennheiser wireless microphone will be needed to project the students' voices. This microphone can be plugged into the video camera for ease of operation. In addition, lighting is an important component of video production. A digital light kit will be purchased to provide appropriate lighting for student projects.

Materials

A six pack of JVC mini DV digital cassettes will be needed to store video until it can be edited and copied onto the computer programs. We will purchase a spindle of DVD's to copy our awesome commercials, movies, and video clips for students to share.

Professional Development

Professional Development will be provided by a local educator and video production trainer, Mark Purdy, at an hourly wage of \$25. We will need approximately three 4 hour sessions to complete the training. He will provide training on all video equipment, the two software programs, computer applications, best practices and how to engage students in this wonderful learning experience.

Narrative description of how what I am proposing to purchase will enhance my teaching in the classroom.

“Lights! Camera! Action!” the student director shouts to the rest of the class as they ready for taping of the weather broadcast they researched, produced and directed. Students worked together to capture the knowledge they gained about climate to put together the weather broadcast with the video presentation equipment.

By purchasing video presentation hardware and software, I will be able to take my students to this next level of learning. Students will not only learn technology skills, but will also learn real-world presentation skills and curriculum applications. Giving my students access to the medium of video will provide me with the tools to better help my students meet the state standards in science, technology, and language arts. When students are actively engaged, learning occurs. The following tools will enable me to create a video production studio which will in turn engage my students in the learning process, thus improving student learning.

Curriculum Applications

With access to a video camera and video editing software, my students will be able to present information they learn in a video format. For example, in the past I have taught the required climate unit by reading the text out loud while the students take notes, assigning the students to draw a few clouds and then giving students a test. I know this is not the most effective way to teach this unit nor is it a real-life application. However, with access to video editing tools, students will be more engaged in learning about climate because they will be required to present the information they have learned through a simulated live weather forecast. Using the interactive video format, I will be able to take a section in my curriculum that students have found uninteresting and make it so that students are more engaged. The video equipment will also allow students to take ownership of their learning experience and remember it for a lifetime. Both the engagement and ownership in the learning process increases student learning.

Hardware to Assist in Development of Real-World Skills

In addition to a video camera, a cordless microphone will give students the tool to project their voices to their audience as well as give them the mobility to be able to move around the classroom more freely so they do not lose the attention of their audience. It also gives them the tool professionals use to produce videos.

One computer desktop and one laptop with graphic software will allow students to be able to download their video from the camera onto the computer for creation and editing of their video projects. A laptop is necessary for free mobility within and outside the classroom.

Although I realize that my current classroom provides more technology exposure to my students than in the average 5th grade classroom, I am not satisfied with just exposure—I want to take my students to the next level and this grant would allow me to give students that next level of technology integration and student achievement. I look forward to the engagement that my students will experience by having access to video production equipment.